

The diagram illustrates a power converter system with the following components and signal flow:

- Inputs:**
 - DC Voltage Set Value** (11) and **Loss Set Value** (12) are inputs to the **First Controller** (13).
 - HF Output Set Value** (14) is an input to the **Second Controller** (15).
- Control and Detection Blocks:**
 - First Controller** (13) receives feedback signals **Vdcset** (16) and **Ploss** (17) and outputs **Vdc** (18) and **Piset** (19) to the **DC Power Supply** (13).
 - DC Power Supply** (13) outputs **Vdc** (18) to the **DC Output Detector** (14) and **Pdc** (15) to the **First Controller** (13).
 - DC Output Detector** (14) outputs **Vdc** (18) to the **First Controller** (13) and **Pdc** (15) to the **Amplifier** (16).
 - Amplifier** (16) receives **Pdc** (15) and **Piset** (19) and outputs a signal to the **HF Output Detector** (17).
 - HF Output Detector** (17) outputs **Pf** (18) to the **Second Controller** (15) and **Ploss** (17) to the **Loss Calculator** (18).
 - Loss Calculator** (18) receives **Ploss** (17) and **Ploss** (17) and outputs **Ploss** (17) to the **First Controller** (13).
 - Second Controller** (15) receives **Pf** (18) and **Piset** (19) and outputs **Pfset** (20) to the **HF Output Set Value** (14).
- Power and Load:**
 - The **DC Output Detector** (14) outputs **Vdc** (18) to the **Load** (16).
 - The **Load** (16) outputs **Ploss** (17) to the **Loss Calculator** (18).

FIG. 2

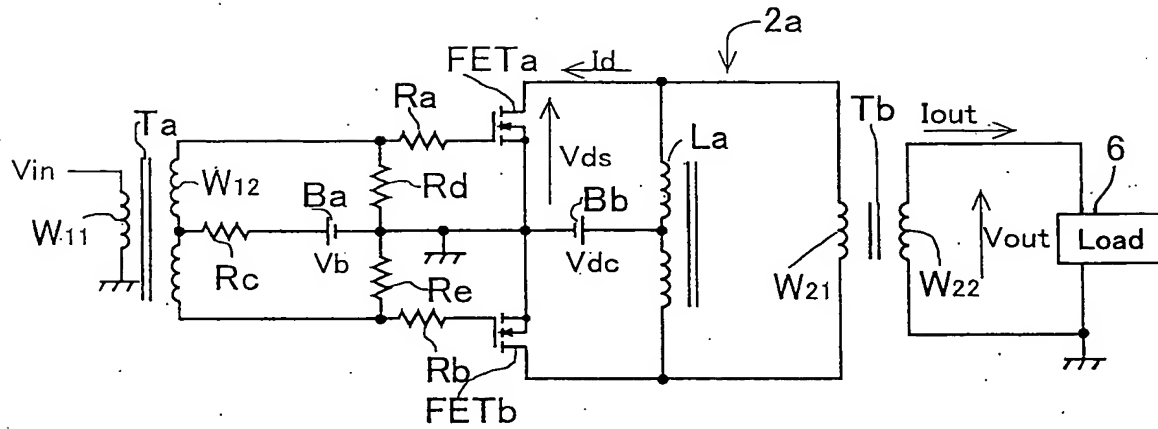


FIG. 3

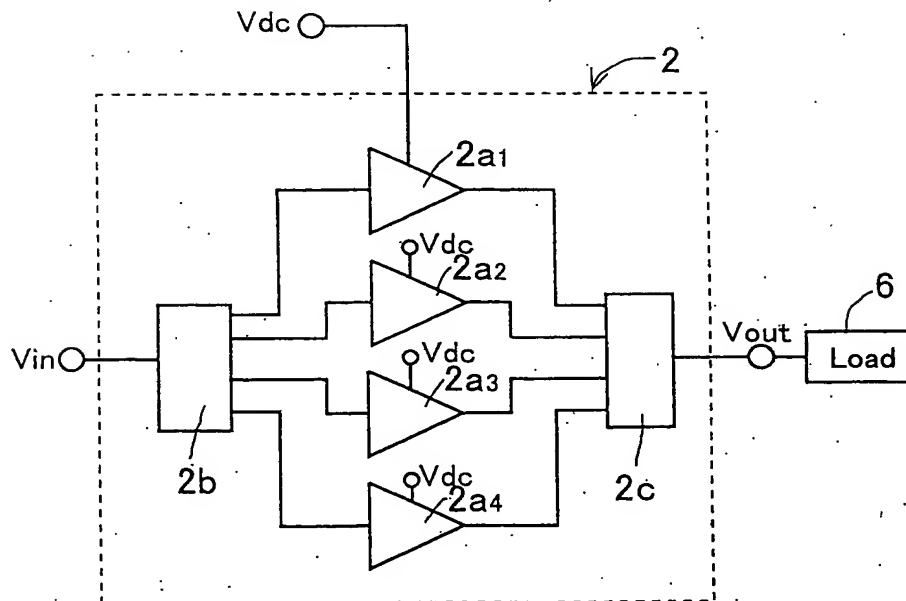


FIG. 4

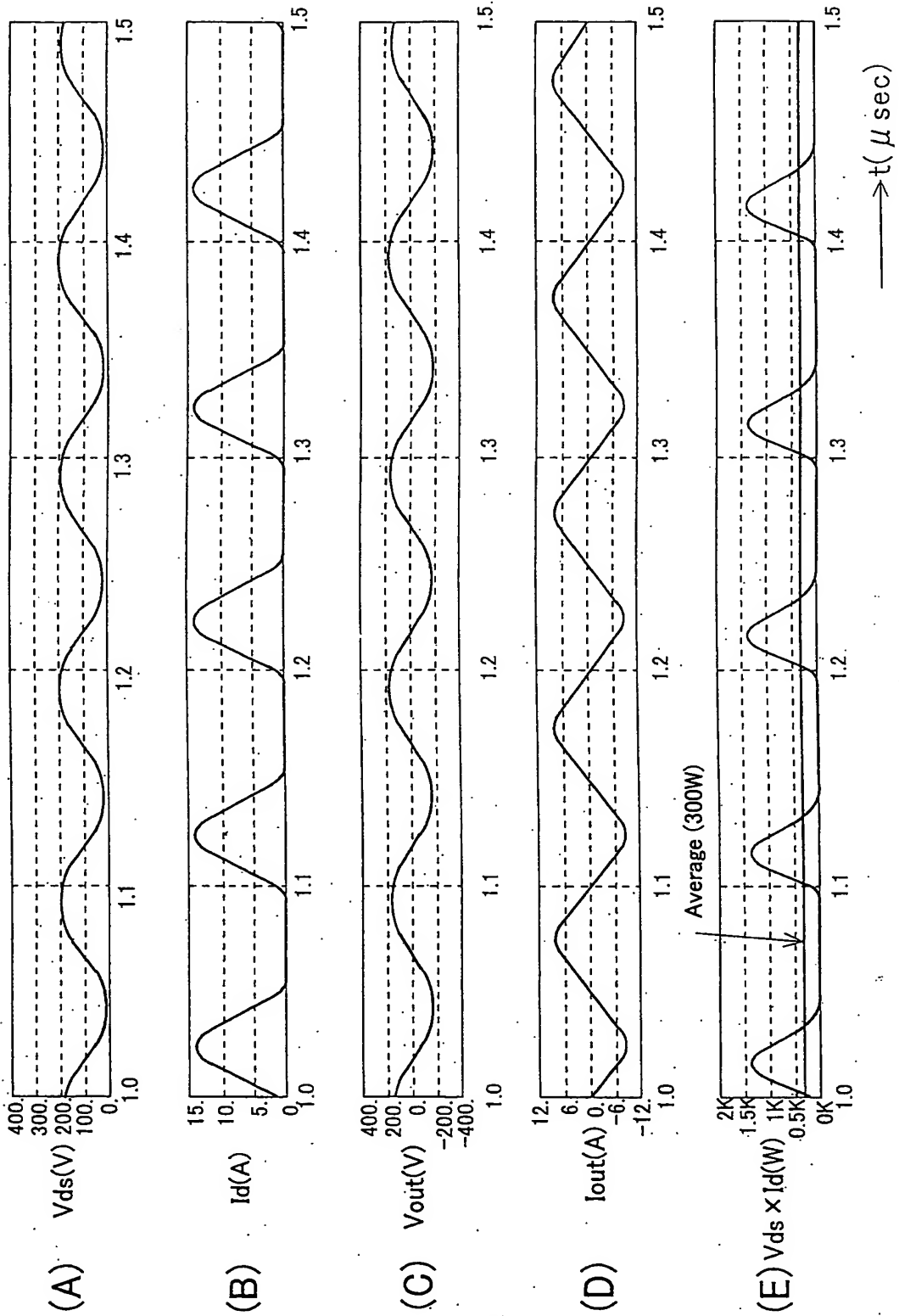


FIG. 5

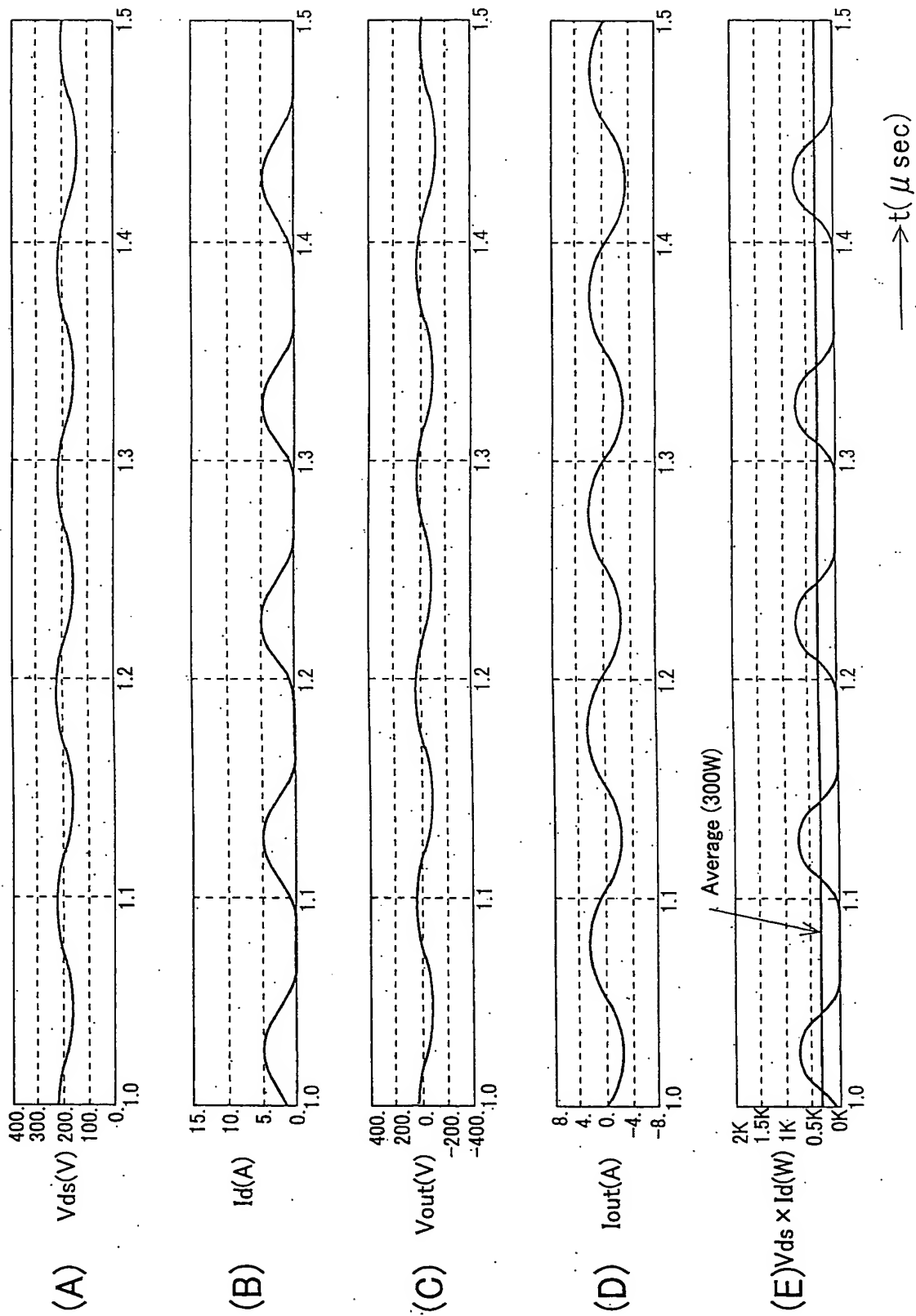


FIG. 6

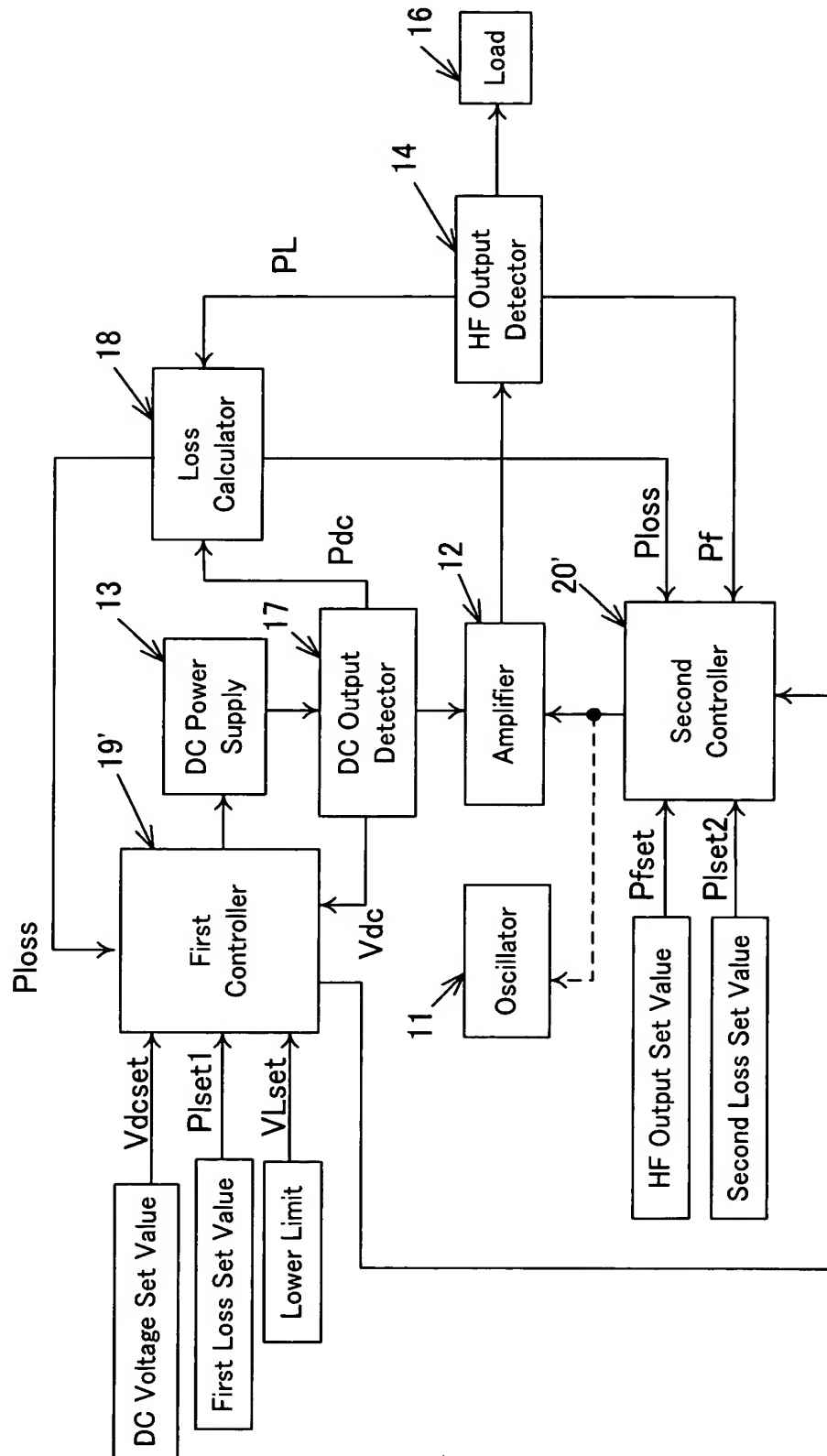


FIG. 7

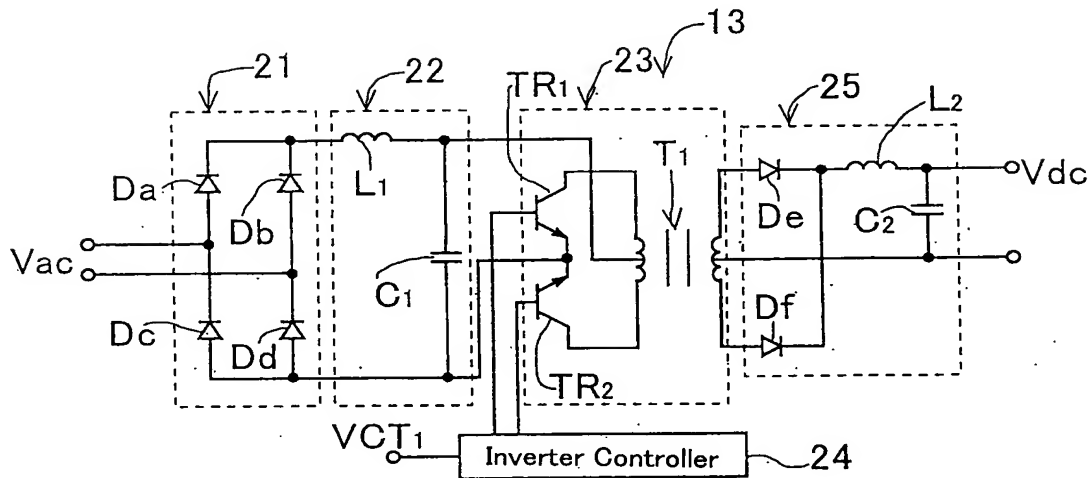


FIG. 8

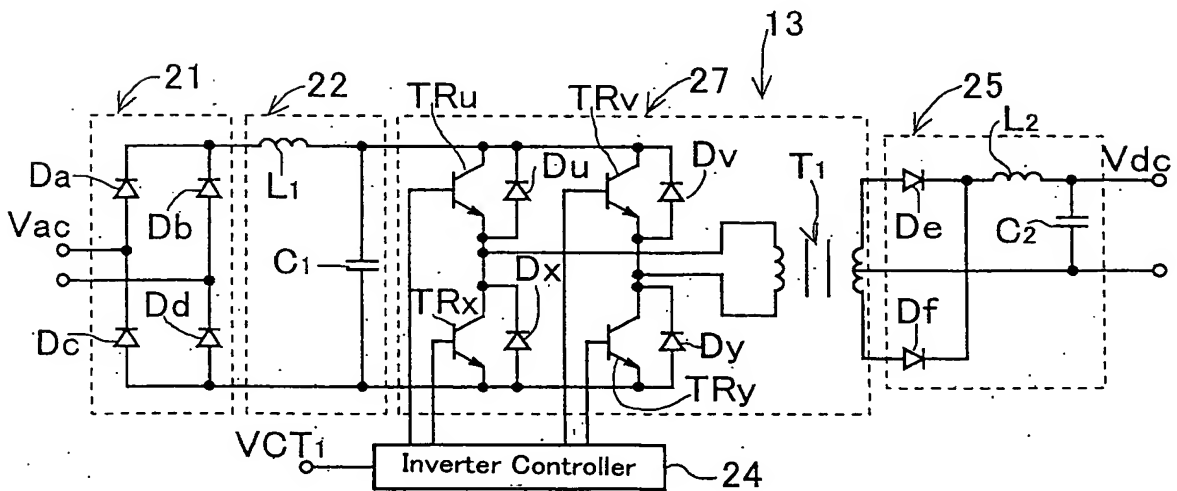


FIG. 9

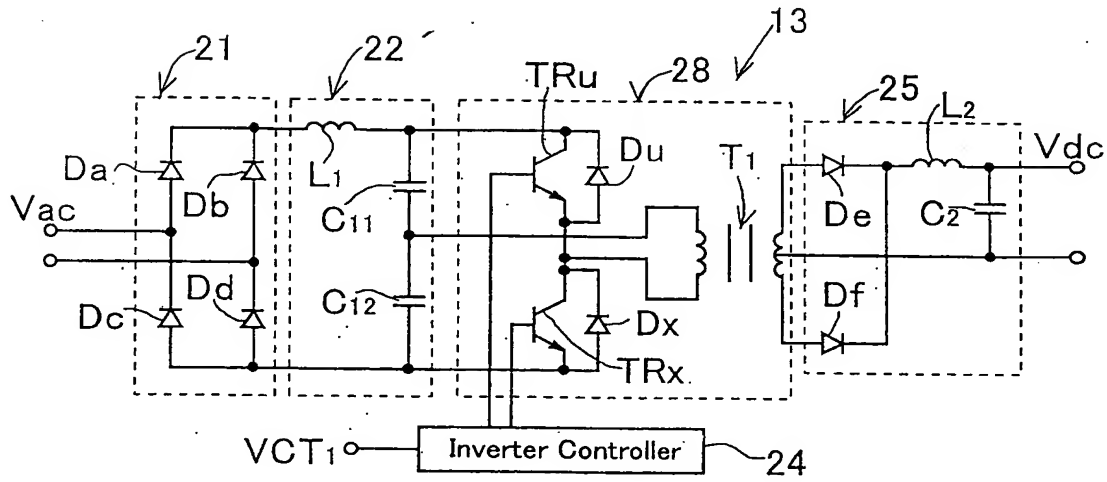


FIG. 10

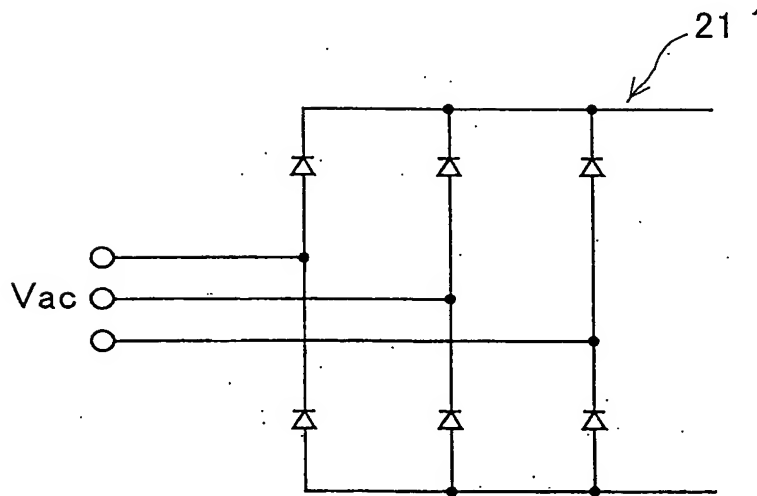


FIG. 11

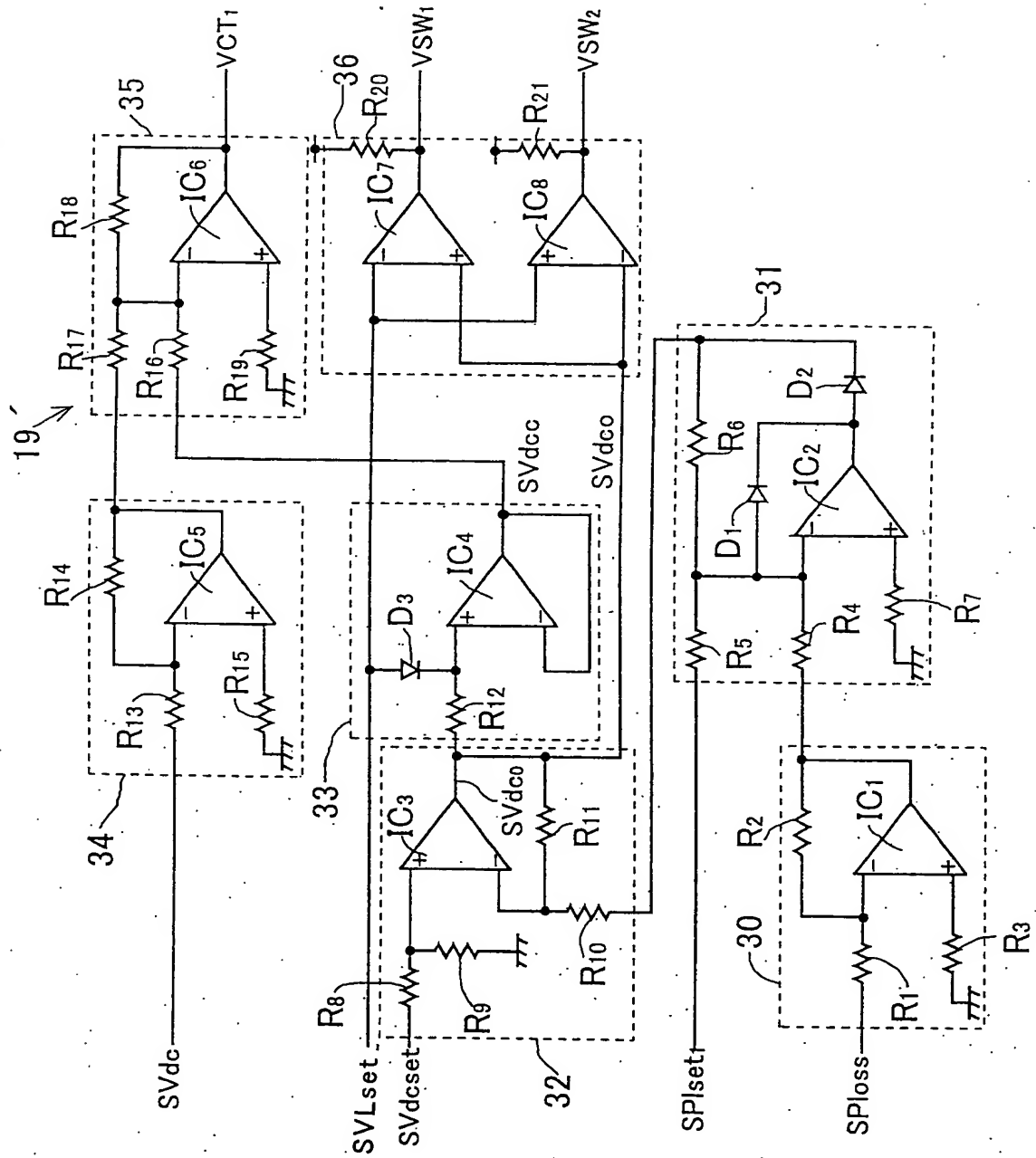


FIG. 12

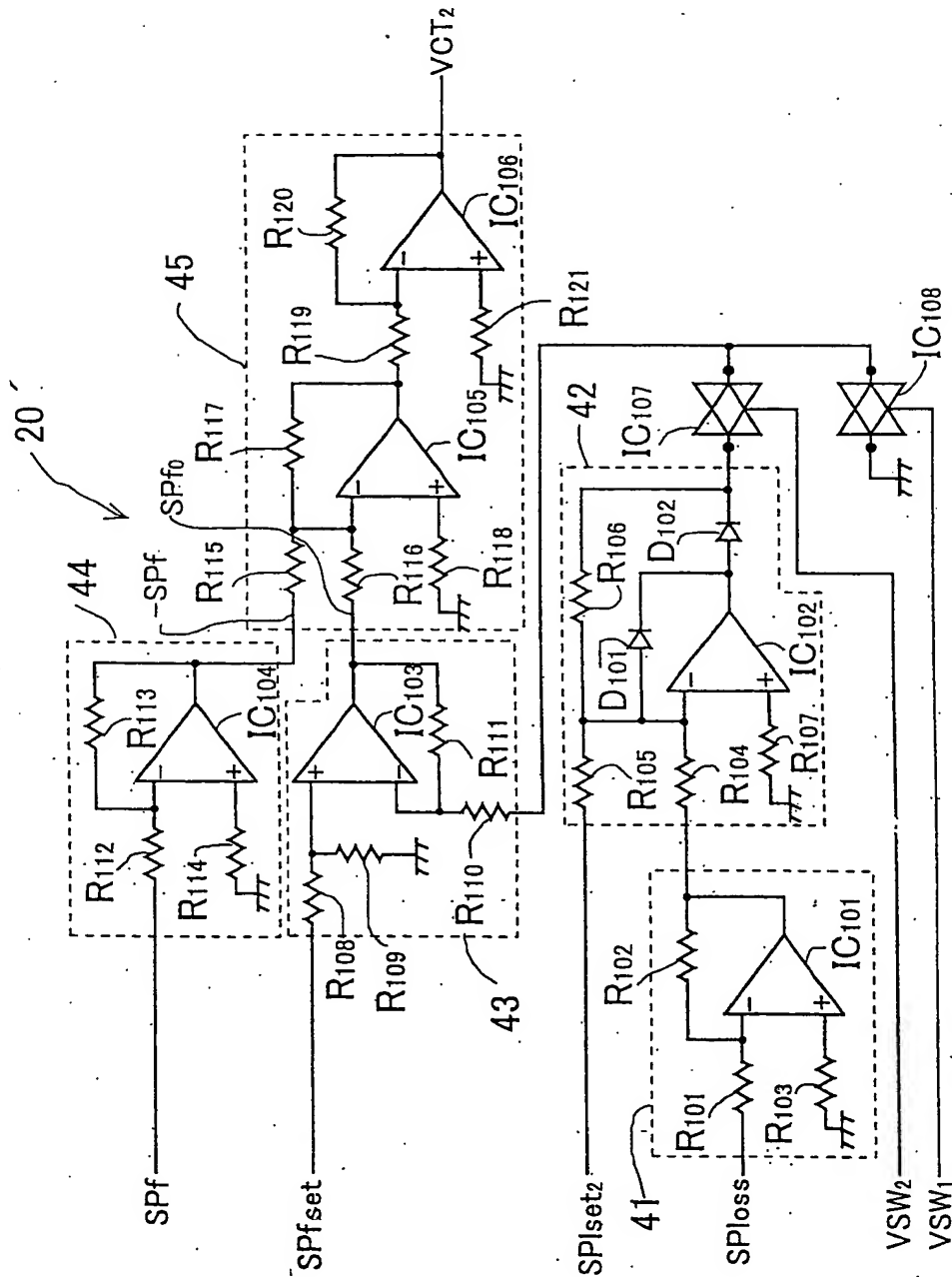


FIG. 13

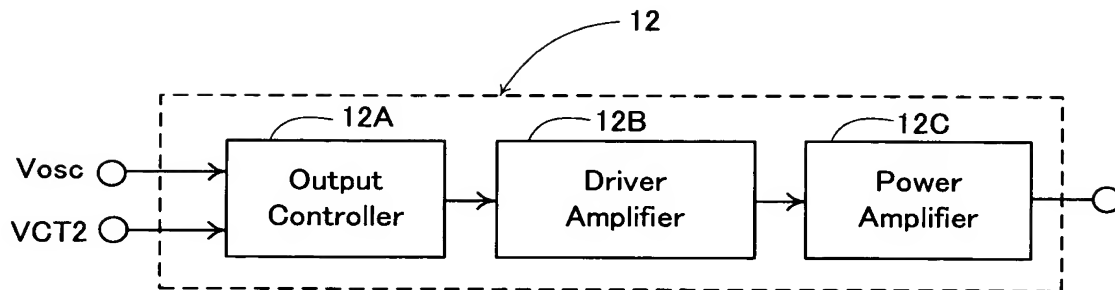
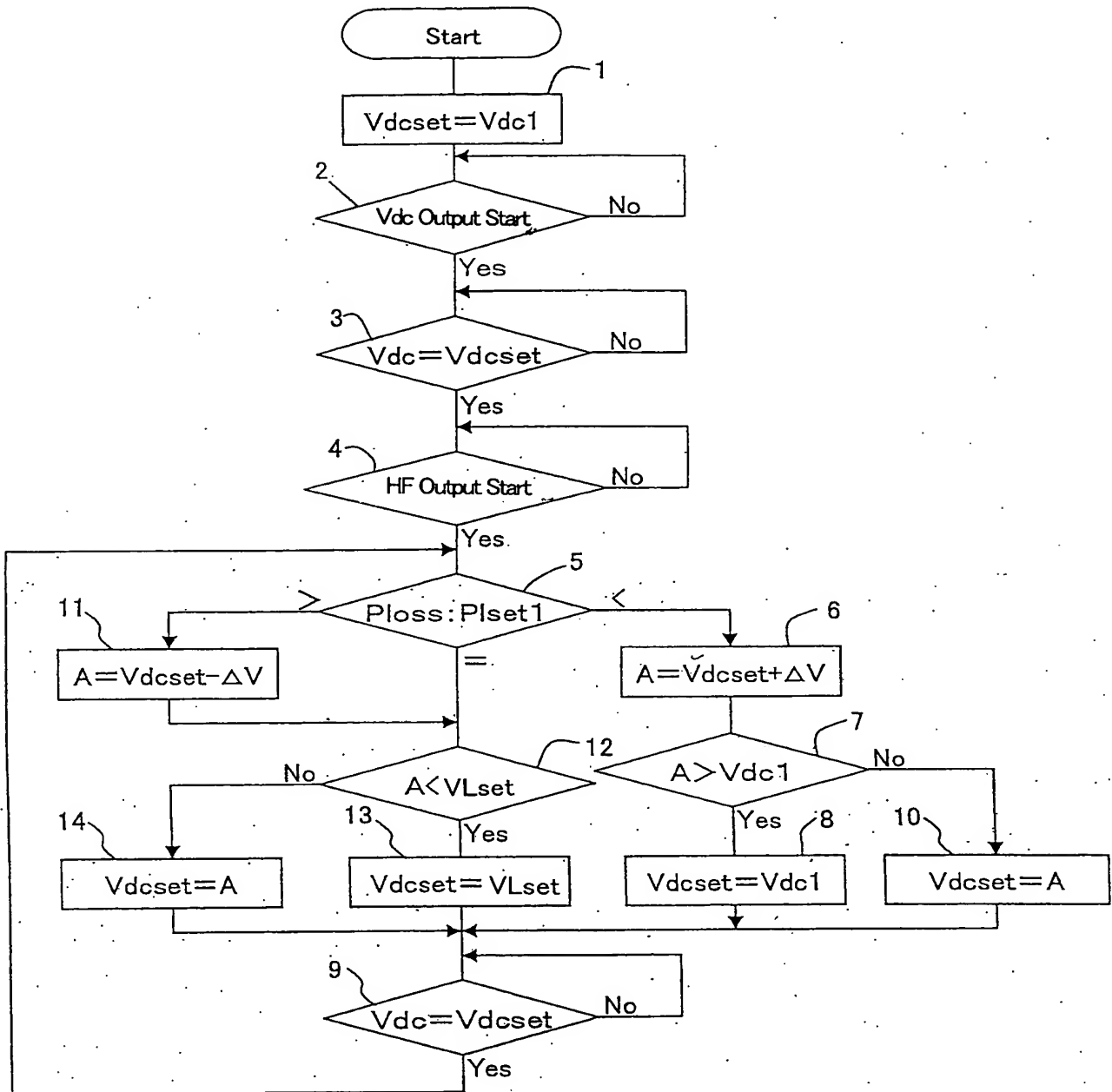
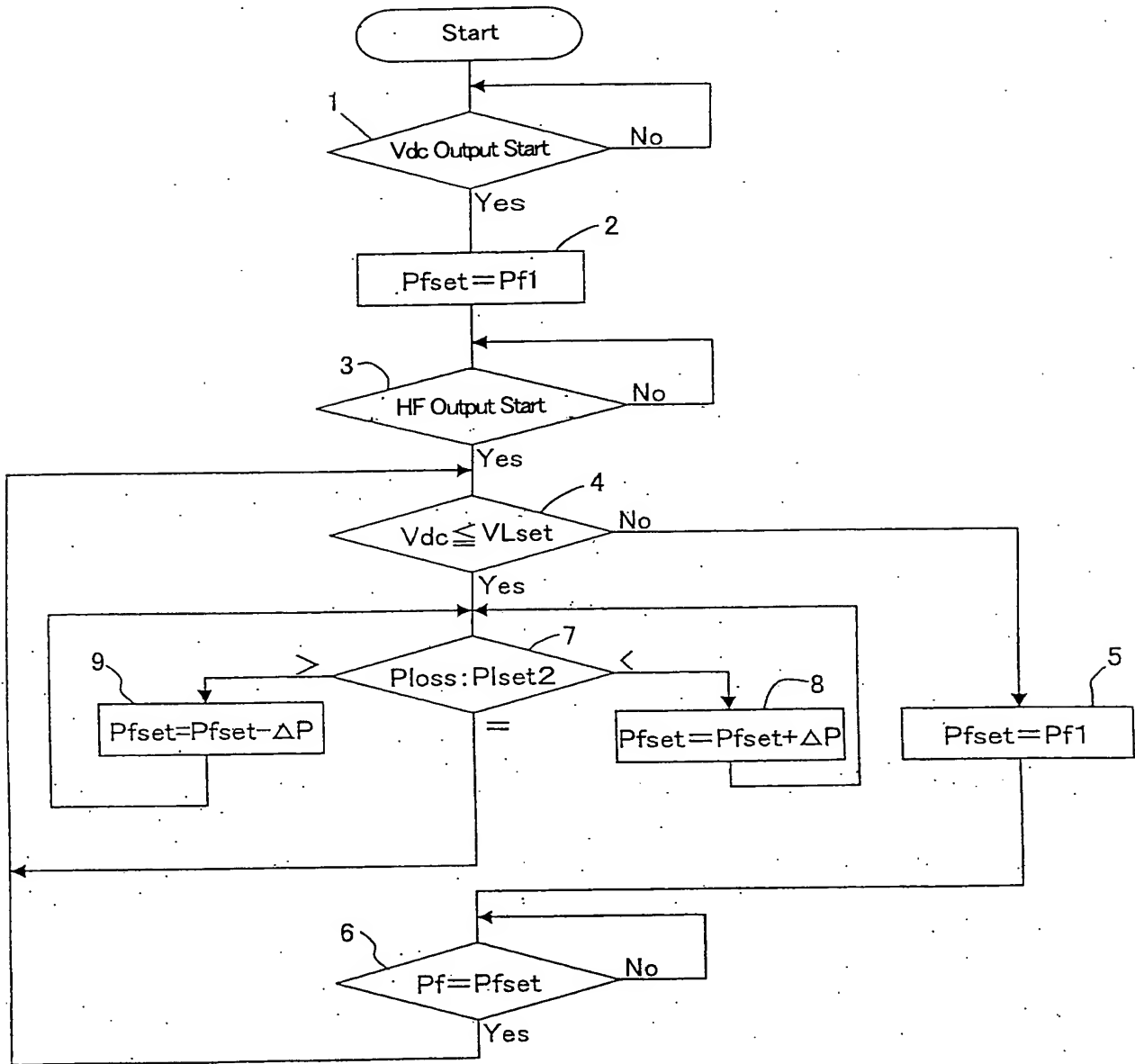


FIG. 14



Vdc ... Output Voltage of DC Power Supply
Vdcset ... Vdc Set Voltage
VLset ... Vdc Lower Limit Set Voltage
Ploss ... Calculated Loss
Plset1 ... First Loss Set Value
Vdc1 ... Normal Output Voltage Set Value (Initial Value) of DC Power Supply
 ΔV ... Fixed Small Voltage Set Value

FIG. 15



Pfset ... Forward Power Set Value
Pf1 ... Forward Power Set Input
Pf ... Forward Power Output Value
Vdc ... Output Voltage of DC Power Supply
VLset ... Vdc Lower Limit Set Voltage
Ploss ... Calculated Loss
Plset2 ... Second Loss Set Value
 ΔP ... Fixed Small Power Set Value

FIG. 16

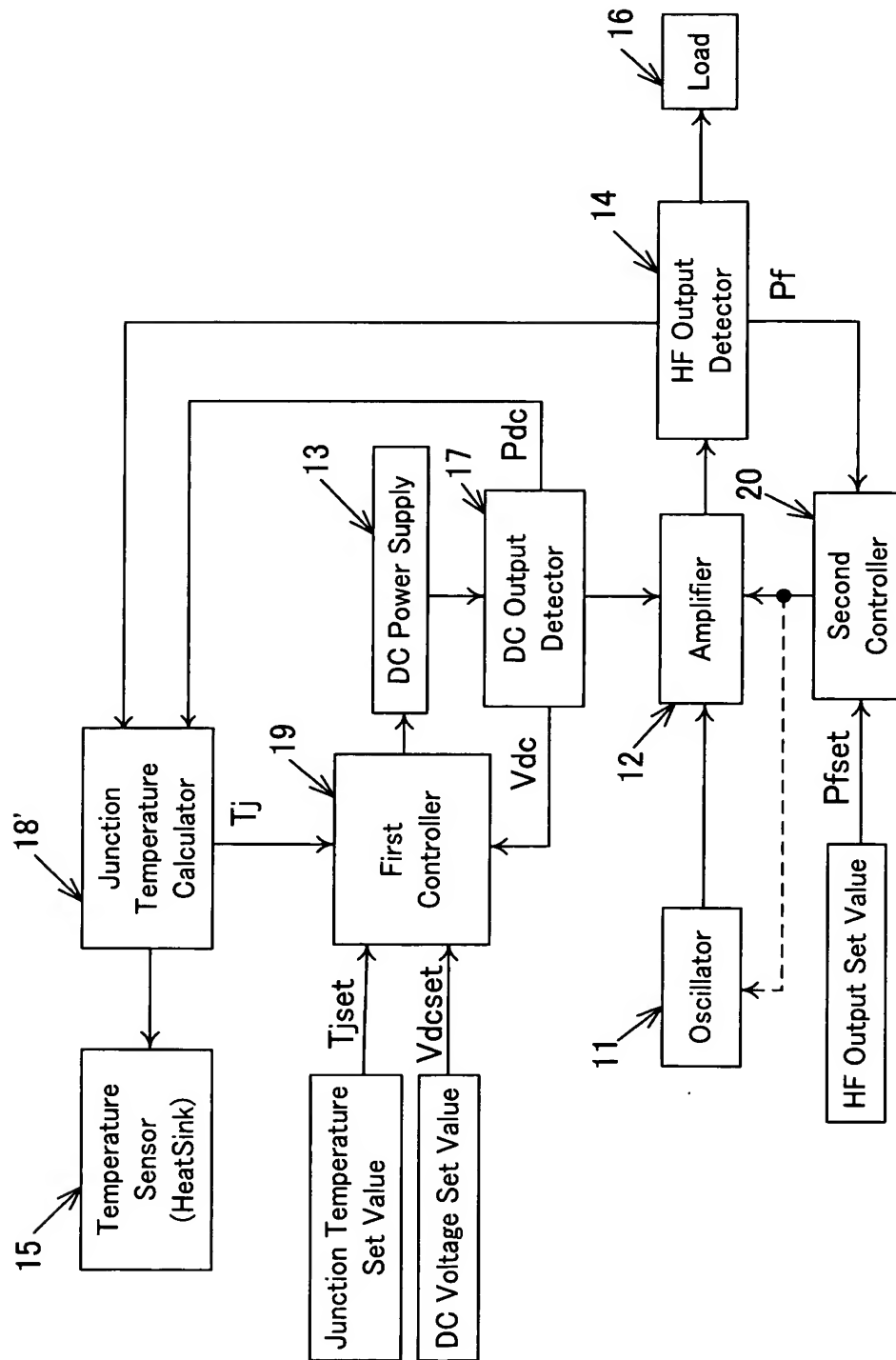


FIG. 17

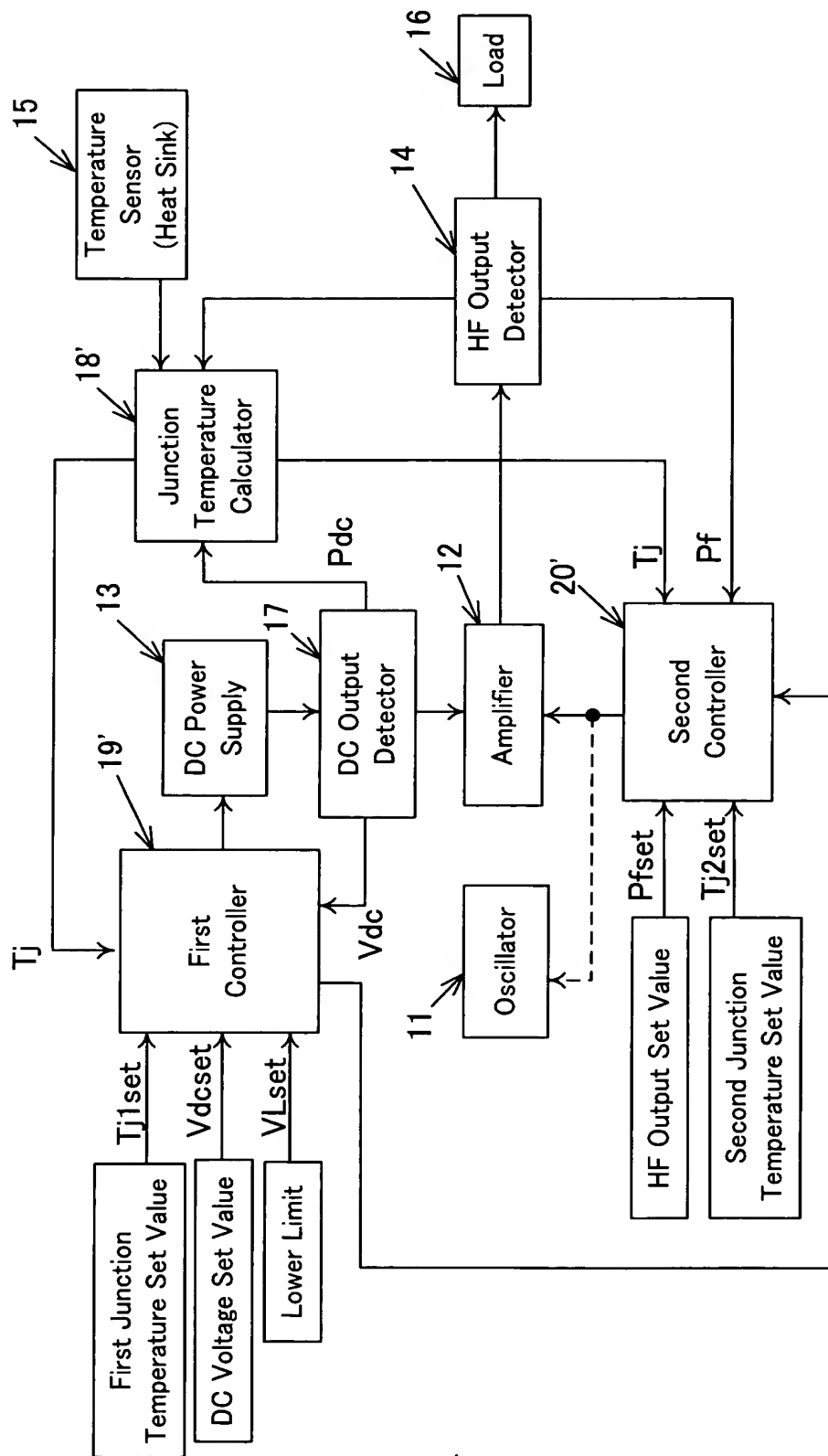


FIG. 18

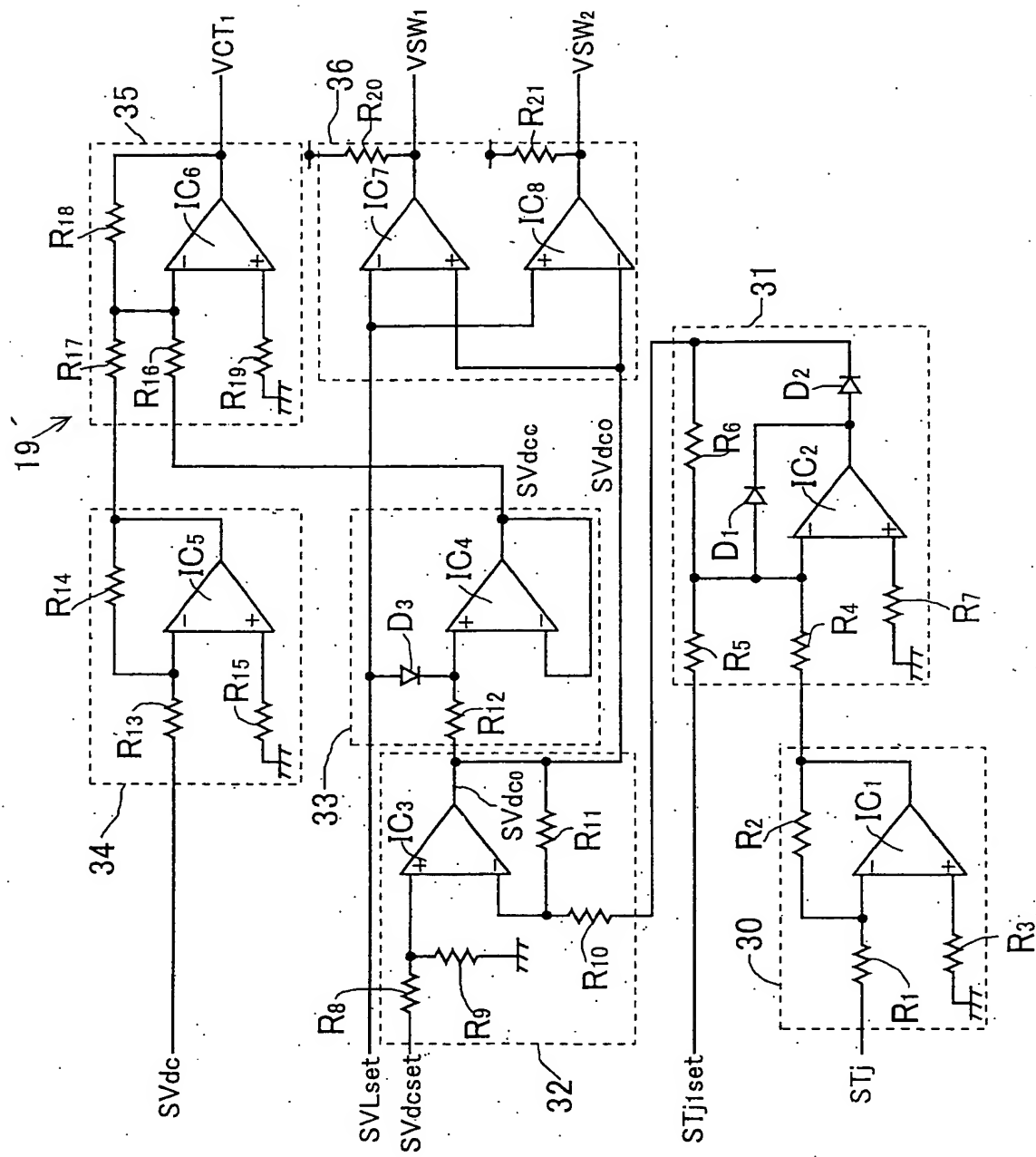


FIG. 19

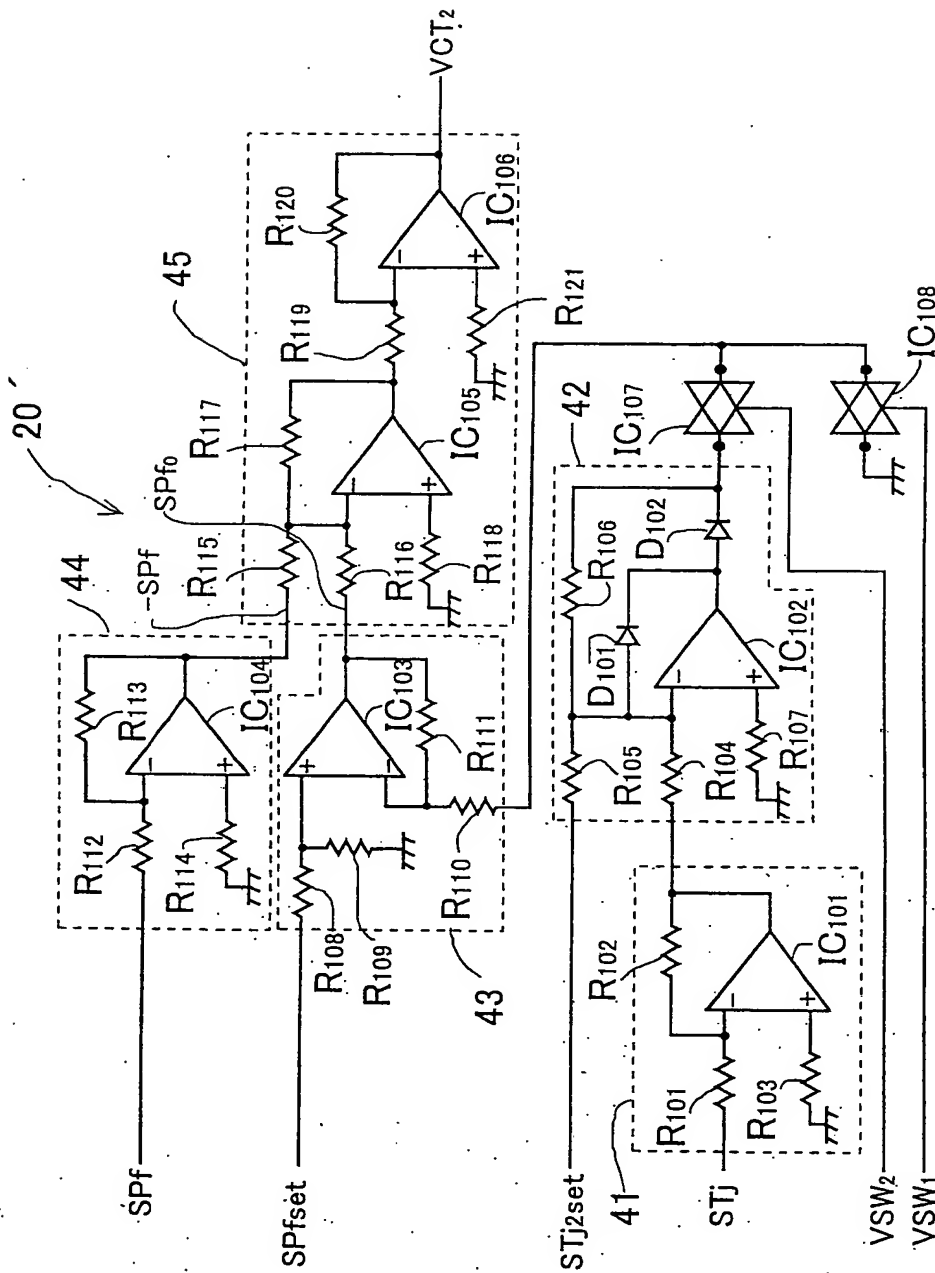
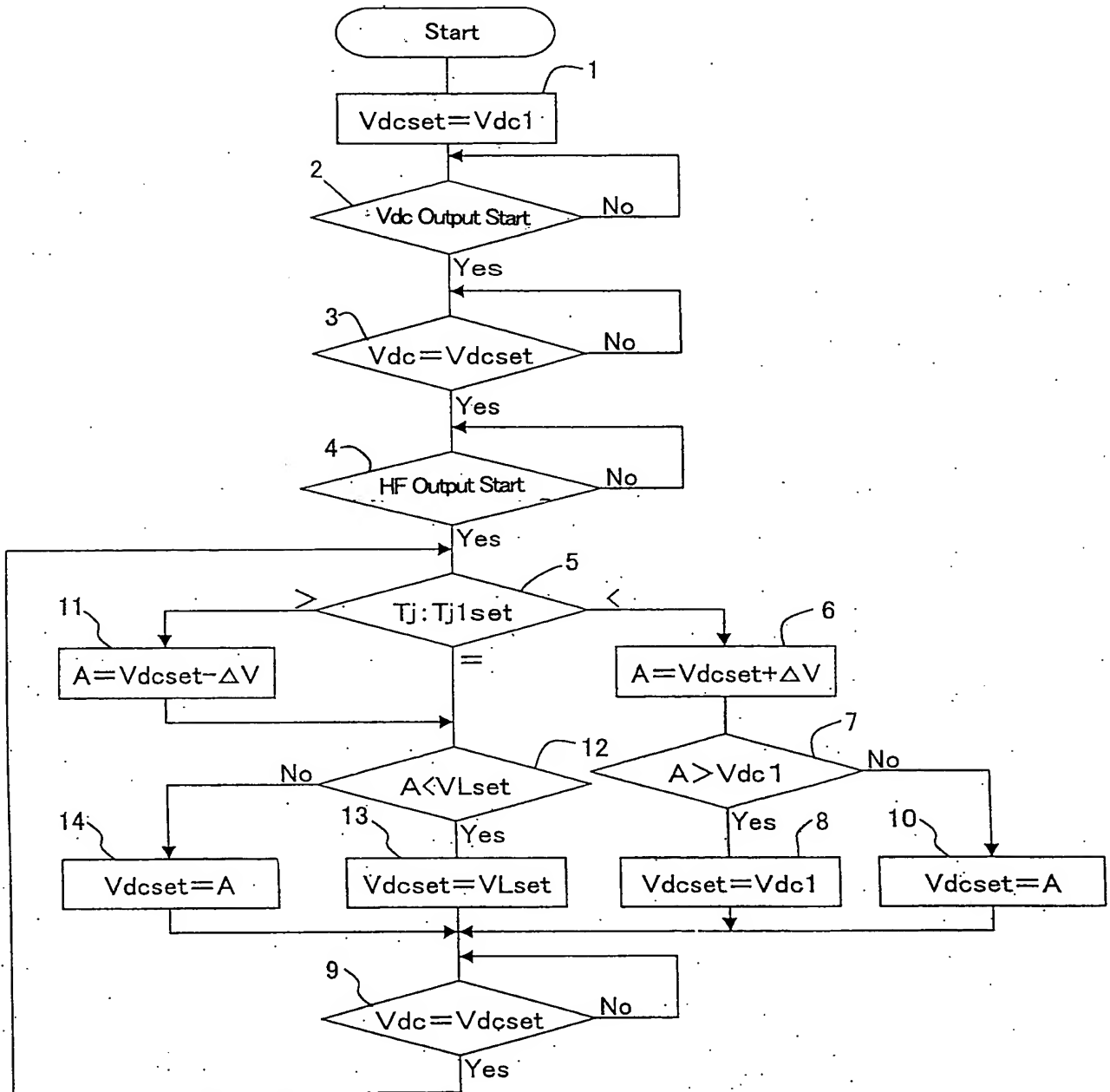
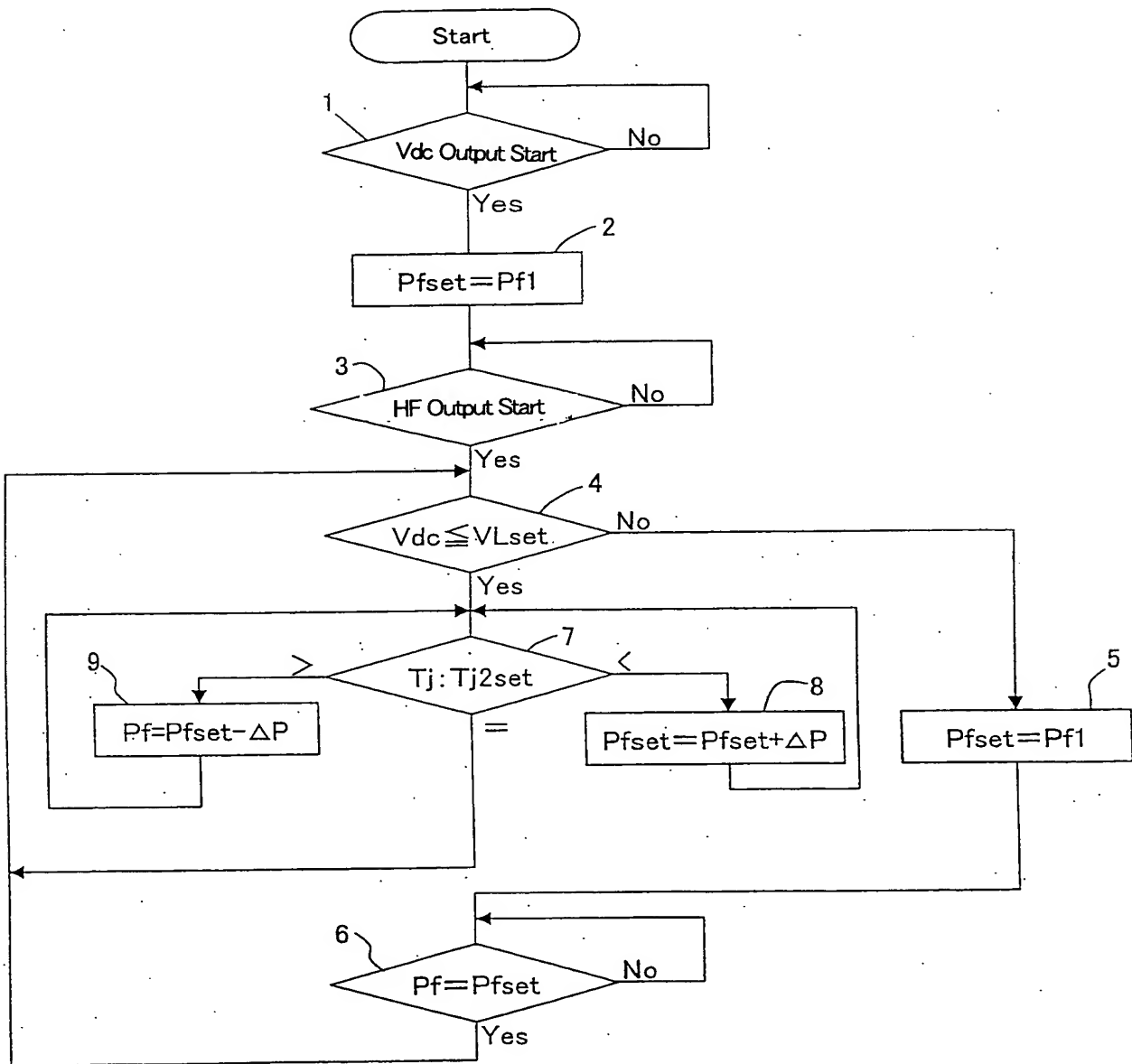


FIG. 20



Vdc ... Output Voltage of DC Power Supply
Vdcset ... Vdc Set Voltage
VLset ... Vdc Lower Limit Set Voltage
Tj ... Calculated Junction Temperature
Tj1set ... First Junction Temperature Set Value
Vdc1 ... Normal Output Voltage Set Value (Initial Value) of DC Power Supply
 ΔV ... Fixed Small Voltage Set Value

FIG. 21



Pfset ... Forward Power Set Value
Pf1 ... Forward Power Set Input
Pf ... Forward Power Output Value
Vdc ... Output Voltage of DC Power Supply
VLset ... Vdc Lower Limit Set Voltage
Tj ... Calculated Junction Temperature
Tj2set ... Second Junction Temperature Set Value
 ΔP ... Fixed Small Power Set Value

FIG. 22

